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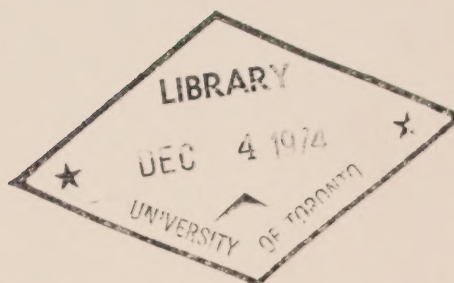
EMPLOYEE ATTITUDES TOWARD COMPRESSED WORK
SCHEDULES IN ONTARIO:

A CASE STUDY OF TEN FIRMS

Number 6



Ministry of
Labour



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SCHEDULES IN ONTARIO:

A CASE STUDY OF TEN FIRMS

Number 6

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INTRODUCTION

During the summer 1973, a pilot study was undertaken to provide insight into the impact that compressed work schedules are having on firms and employees in Ontario. The term compressed work schedule refers to any re-arrangement that both reduces the number of days and increases the number of hours worked per day, by an employee, in a given cycle.

Because compressed schedules have implications in terms of the working conditions and personal lives of employees, and because most of the literature on this topic concentrates on the firm,¹ the present study puts particular emphasis on the effect these schedules are having on the employees.

Coverage

This study is not representative of all compressed work situations in the province. It includes only establishments where the schedules were operating successfully. As a result, the study does not take into account many problems which occurred in those situations where the schedules were discontinued. As well, the information reported pertains to only 10 firms and 298 employees; less than 5 per cent of the numbers known to be on a compressed schedule at the time of the project.

In spite of the short-comings just noted, the ten firms would seem to have many of the same characteristics as the other establishments operating on compressed schedules. Table 1 presents a few characteristics of these establishments.

Three of the 10 firms previously operated irregular schedules with employees required to work up to seven consecutive days before having a break between work periods. In one other establishment, employees worked five irregularly scheduled shifts in each week. The remaining 6 firms previously worked a standard 5-day week with hours set at, or below 8 per day, or 40 per week.

Five of the firms converted from a 5 to a 4-day work week. In 2 of these firms the hours worked per week decreased slightly, but the weekly pay remained unchanged. The other 3 firms converted to 12-hour shifts, and in all of these the firms had continuous 24-hour operations. Of these, the most common schedule was based on a 3 days on 3 days off cycle, where the employees worked an average of 40 to 42 hours per week. One of these firms introduced the 12-hour shift at the same time as they began to operate on a continuous basis.

1 This includes two studies published by the Research Branch of the Ontario Ministry of Labour "The Compressed Work Week in Ontario", Sept. 1972: and, "Selected Characteristics of Compressed Work Schedules In Ontario", July, 1973.

TABLE 1

Selected Characteristics of the Firms Involved in the
Case Studies of Compressed Work Schedules, Ontario, Summer 1973

Firm	Type of Schedule		Number of Employees		Type of work of employees on the compressed schedule
	Previous Work Schedule	Compressed Work Schedule	In the Establishment	On the Compressed Schedule (Sex)	
	Days per cycle - hours per cycle (hours per shift)	Days per cycle - hours per cycle (hours per shift)			
1	5-40(8)N	4-40(10)N	360	19(M)	cutting, boring and related operations in the production of wood furniture
2	irregular schedule 21-168(8)C in a 4 week period	3-36(12)C 3 days off	130	92(M)	casting, finishing and maintenance operations in a metal mill
3	5-37½(7½)	3-36(12)C 4 days off	266	44(M)	printing, type- setting and related oper- ations
4	irregular schedule 30-240(8)C in a 6 week period	3-36(12)C 3 days off	300	95(M)	monitoring and maintenance of auto- mated machinery in chemical plant
5	irregular schedule 5-40(8)C	3-36(12)C 3 days off	28	10(M)	process monitoring and maintenance of automated machinery in the production of liquid gas
6	5-40(8)	4-40(10)	17	17(B)	administrative and clerical; packaging and processing of medicine
7	5-40(8)N	4-40(10)N	244	95(M)	machine operating and assembling of automobile parts
8	5-37½(7½)	4½-34(7½+4)	30	30(B)	administrative, clerical, design engineering; and drafting in an engineering firm
		4-34(8½)	25	25(M)	
9	irregular schedule 10-80(8)C in a 2 week period	6-72(12) + 1-(8)C in a 2 week period	1,100	12(F)	nursing in a hospital coronary care unit
10	5-36¼(7¼)	4-36(9)	70	33(B)	administrative and clerical in pension administration
TOTAL: 10			2,570	472	

N: refers to night or afternoon shift;
C: refers to an operation which is continuous 24-hours a day 6 or 7 days a week;
(M): male;
(F): female;
(B): both male and female.

The size of the establishments surveyed varied from 17 to 1,100 employees, with a total employment in the 10 firms of just under 2,600 people. The number working on compressed schedules varied from 10 to 95 employees with a total of 472 employees; or 18 per cent of the total employment in the 10 firms. All of the employees worked on the compressed schedule in only 2 firms. The employees working on compressed work schedules were members of a union in 4 of the 10 firms.

The occupations of the employees surveyed varied considerably. However, almost two-thirds worked in production occupations, and the remaining one-third were involved in clerical, drafting and other service related work. The main occupations of employees on compressed schedules are presented by establishment in the last column of Table 1.

The length of experience of the employees with the compressed schedule varied from less than six months to just over two years. As a result, most of the findings reported in this publication are short-term in nature.

Methodology

The study procedure was similar in each of the ten establishments surveyed. Initially, each firm was contacted by telephone to see if it would be interested in taking part in the study. Once interest was shown, a visit was made to the firm. At this time, management personnel were interviewed to obtain information about the compressed schedule. This included discussions of the reasons for the conversion, the planning and implementation process, and the effects the new schedule was having on both the firm and its employees. A tour of the work area was also made to see what kinds of jobs were being carried out by the employees working on the compressed schedule. Wherever possible, union representatives and a sample of employees were also interviewed.

The next step was surveying the employees working on the compressed schedule. Questionnaires were usually distributed to the employees by company or employee/union representatives. In two cases the questionnaires were distributed by members of the Research Branch, and completed during the visit. In one instance, the survey of employees was carried out by mail. Follow-up arrangements were generally made with a representative appointed in each establishment. In three cases this was a representative of management, and in four others it was an employee or union official.

Responses were received from 62 per cent of the employees known to be working on the compressed schedule. Several employees were on holiday and, therefore missed the survey. It is likely that the length of the questionnaire prevented some persons from completing it.

The questionnaire was made up of thirty-eight questions, covering a wide range of topics considered to be relevant in studying the impact of the compressed schedules on employees. Areas covered included the personal characteristics of the employees; their feelings about the schedule; the effect of the schedule on several work-related areas including absenteeism, fatigue, overtime, moonlighting and travel to and from work; and changes in family and social life, and in the use of non-working time.

The results of the study are presented in five sections. The first two provide background information on the reasons for converting to a compressed schedule, and on the planning and implementation process used in the firms. The third section deals with employee attitudes towards the schedules. This is followed by a brief discussion of both the work and non-work related effects of the compressed schedules. A summary is provided in the final section.

REASONS FOR THE COMPRESSED SCHEDULE

While individual circumstances varied considerably, the employer in each of the 10 firms surveyed indicated that the initiative for the compressed schedule came about as a result of specific concerns over production and operating problems or employee dissatisfaction. The two were often inter-related. Most of the employers indicated that, in addition to alleviating their specific problems, they had anticipated that other benefits would accrue to the firm and the employees as a result of the new schedule.

In two instances, the firm introduced the idea of a compressed schedule for production purposes - in one, to expand production by operating continuously six days a week, and in the other to generally improve production scheduling. In two other establishments, there was a high rate of turnover and absenteeism among night-shift employees. In both cases the employer and the union saw the compressed schedule as a possible solution.

Absenteeism and general employee dissatisfaction with existing schedules were the primary reasons for changing to a compressed schedule in four other establishments. In three of these firms, the employees were involved in continuous operations. Their schedules called for work periods of up to seven consecutive days, or other irregular arrangements with very few weekends off. The employees initially proposed the compressed schedules in three of the four firms.

Finally, improving the working conditions of employees appeared to be the basic motive behind the compressed schedules in two companies. In one instance, employee complaints about

traffic congestion, both to and from work, resulted in the move to a compressed schedule. In the other firm, the employees had advanced the idea of the compressed schedule to obtain larger blocks of non-working time.

PLANNING AND IMPLEMENTATION

Before introducing a compressed schedule, it seems desirable to examine the implications of the alternative arrangements and ensure that the employees are agreeable to try the proposed scheme. Seven of the ten firms involved their employees in the planning of the compressed schedule. In three of these companies, employer-employee committees were responsible for developing a proposal. In the four others, employees were given an opportunity to make suggestions regarding the starting and finishing times and other aspects of the schedule which directly affected them.

A common practice was to obtain information from firms that had already implemented a compressed schedule and from published material. In all instances employees were provided with information that would allow them to form their own opinions about the desirability of the proposed scheme. The attitude questionnaire asked employees if they were given enough information prior to the conversion to decide whether or not they wanted to work on the proposed schedules. Over ninety per cent of those responding indicated that they had been given sufficient information.

Ontario legislation requires that all employers who wish to have their employees work in excess of eight hours per day must apply for permission from the Employment Standards Branch of the Ontario Ministry of Labour. Applications are considered so long as the new schedule requires the employees to work no more than twelve hours per day, and the majority of the employees favour the change.

Of the employees responding to the survey, the 213 who were with their firms at the time of implementation had an opportunity to express their views on the proposed schedule.¹ The most common way of obtaining employer opinion was by means of a formal vote or poll. However, a significant proportion of employees expressed their opinion through an employee-management committee, or directly to either an employee or management representative. (Table 2)

In all but one company, employee opinion was sought for the introduction of the schedule on a trial rather than a permanent basis. In every case further evaluation was planned for the end of the trial period.

1. It should be noted that 85 employees, included in the survey, joined their firms after the implementation of the compressed schedule.

TABLE 2

Methods of Obtaining Employee Opinion About the Proposed
Compressed Schedule by Proportion of Employees
Involved in Each Method

<u>Method</u>	<u>Proportion of Employees[*] Involved in Each Method (%)</u>
Formal vote or poll	60.6
Employee-management committee	37.5
Directly by union or employee representative	17.3
Directly by employer (eg. employee interviews)	13.9
Other	9.6

* The number of employees responding to this question was 213,
and 30 per cent checked more than one option.

EMPLOYEE ATTITUDES TOWARD THE COMPRESSED SCHEDULE

Employees completing the questionnaire provided information on their feelings toward the schedule both before its implementation and at the time of survey. This section reports on the attitudes of employees and explores variation in attitudes by characteristics such as office and non-office category, type of schedule, and age of the employee.

A large majority of the employees in all ten firms indicated that they initially favoured changing to the compressed schedule. Overall, eighty-seven per cent of the employees indicated that they supported the change before the implementation of the schedule.

Employees were also asked why they favoured or opposed the proposed schedule. Although the responses may be biased by the subsequent experiences of the employees, those comments which were received are useful in understanding various attitudes towards the change. The responses given by those who initially supported the conversion, in order of frequency, were as follows: "longer weekends", "more days off between work periods", "fewer days of work" and "better rested for work".

It is interesting to note that many of the employees working in continuous operations expressed a strong dislike for their previous schedules.

Employees who opposed the new schedule generally stated either that they were against working longer hours per day or, to a lesser extent, that they preferred a 'normal' 5-day, 40 hour work week. This latter reason was given most often by employees working in the continuous operations.¹ This position was also taken by a number of the continuous-operation employees who were interviewed. Their attitudes towards the compressed schedule were generally positive; however, they stated that if given a choice, many of them would select a standard 5-day work week.

The survey also obtained information on the employees' present feeling about the compressed schedule. As might be expected, given the large percentage of employees in favour of the conversion, more than 80 per cent of the workers surveyed indicated that they were satisfied with the schedule (Table 3). This finding is especially significant considering that over 60 per cent of those surveyed reported that they were "very satisfied", as compared to about 20 per cent who were "somewhat satisfied". Only 11 per cent indicated that they were "somewhat" or "very dissatisfied" with the compressed schedule.

TABLE 3

Distribution of Employees by Present Attitude Towards
The Compressed Work Schedule

Present Attitude Towards Schedule	Employees	
	No.	%
Very Satisfied	184	61.7
Somewhat Satisfied	64	21.5
Somewhat Dissatisfied	19	6.4
Very Dissatisfied	14	4.7
Not Concerned or Undecided	<u>17</u>	<u>5.7</u>
Total	298	100.0

1. The word 'continuous' here refers to operations which require staffing for 24 hours consecutively for six or seven days a week.

In order to determine whether any particular groups of employees were more or less satisfied with the compressed schedule, attitudes were cross-tabulated by the following variables: age; marital status; sex; number of dependent children at home; office and non-office categories; type of schedule; length of time on the schedule; degree of involvement in the planning and implementation process; initial feelings towards conversion; whether or not employees were working in the firms at the time of conversion; and whether or not the employees gave up any benefits in order to obtain the schedule.

A major problem in carrying out this analysis was the small number of employees in the sample. However, on the basis of Chi Square testing a few significant relationships were found. These included relationships between present attitudes toward the compressed schedule and the office - non-office distinction, type of schedule, attitudes towards the compressed schedule at the time of implementation, and age.

As Table 4 indicates, office employees were generally more satisfied with the schedule than non-office employees. In interpreting these findings it is important to remember that other factors are likely to affect this relationship. For example, an employee's general attitude toward his work may play an important role in determining his attitudes toward the compressed schedule.

TABLE 4

Distribution of Employees by Present Attitude Towards
Compressed Schedules and Office and Non-Office Category

Present Attitude Towards Schedule	Percentage of Employees	
	Office	Non-Office
Very Satisfied	69.0	58.7
Somewhat Satisfied	23.0	20.9
Somewhat or very Dissatisfied	1.1	15.2
Not concerned or undecided	6.9	5.2
Total: %	100.0	100.0
No.	87	211

It was also found that the length of the work day influenced attitudes toward the schedules. The data in Table 5 indicates that employees working less than ten hours per day

were the most satisfied with their schedules. These were all office employees, and none showed dissatisfaction with the work arrangement. The group with the 10-hour day included largely non-office personnel, while those working a 12-hour shift all fell into the non-office category.

TABLE 5

Distribution of Employees by Present Attitude
Towards the Compressed Schedule and Daily Hours Worked

<u>Present Attitude Towards Schedule</u>	<u>% of Employees by Daily Hours Worked</u>		
	<u>Less than 10⁽¹⁾</u>	<u>10⁽²⁾</u>	<u>12⁽³⁾</u>
Somewhat or very Satisfied	92.1	76.9	85.2
Somewhat or very Dissatisfied	-	18.7	12.2
Not concerned or Undecided	7.9	4.4	5.3
Total: %	100.0	100.0	100.0
: No.	76	91	131

¹ Pertains to both 4 and 4½ day work week.

² Pertains to 4-day week

³ Pertains to 3 day work week with 3 or 4 days off

As might be expected, those employees who were initially against conversion to the compressed schedule were generally less satisfied with the new arrangement than those who favoured conversion. Over one-half of the small group of employees who had objected to implementation of the schedule remained dissatisfied with it. In comparison, only five per cent of those who initially backed conversion found the schedule to be unsatisfactory.

TABLE 6

Distribution of Employees by Present Attitude
Towards the Compressed Schedule and Age

Present Attitude Towards Schedule	% of Employees by Age		
	Under 25	25-44	45 & over
Somewhat or very satisfied	84.0	85.5	73.8
Somewhat or very dissatisfied	10.6	9.2	16.5
Not concerned or uncertain	5.4	5.3	9.7
Total: %	100.0	100.0	100.0
No.	56	200	42

In terms of age, the findings suggest that older workers are more likely to be dissatisfied with or uncertain about the compressed schedules than younger ones. Table 6 indicates that 74 per cent of the employees forty-five years of age and over expressed satisfaction with the schedule compared to about 85 per cent in the other age groups. However, it would be speculative to base any general conclusions on these findings, since only a small number of older workers were covered by the survey.

As for the remaining variables, no significant relationship was found between present attitudes towards the work schedules and sex, marital status, number of dependent children, and length of time on the schedule.

EFFECTS OF THE COMPRESSED SCHEDULE

A. Work-Related Effects

The employee attitude survey was designed to obtain information on both the work and non-work-related effects of the compressed schedule. In terms of work-related effects, information was obtained on fatigue, changes in attitudes toward the job, absenteeism and turnover, work performance, work expenses, commuting time and the recruiting potential of the new schedule. In a few of these areas additional information was provided by the employers and other persons interviewed.

Fatigue

One of the most important factors influencing attitudes towards the compressed schedule is fatigue. In a previous study published by the Research Branch entitled, "Selected Characteristics of Compressed Work Schedules in Ontario", it was reported that, according to employers, employee fatigue had been a factor in two-thirds of the firms where the compressed schedule had been discontinued. It was also reported as being an area of concern in almost one-third of the firms with active schedules.

As part of the attitude survey, employees were asked about the fatigue associated with the compressed schedule. As Table 7 shows, over one-third of the responding employees reported that they were more tired on the compressed schedule than on their previous one. The large majority of these were non-office employees working at jobs such as machining, product fabricating, light assembly and nursing.

TABLE 7

Distribution of Office and Non-Office Employees
by Tiredness Factor Resulting From Working a
Compressed Schedule

<u>Tiredness Factor</u>	<u>% of Employees</u>		
	<u>Office</u>	<u>Non-Office</u>	<u>Total</u>
More tired	20.7	42.3	35.9
Not more tired	77.0	57.8	63.4
Unknown	2.3	-	0.7
Total: %	100.0	100.0	100.0
No.	87	211	298

In terms of the number of daily hours worked, Table 8 shows that more than one-half of the employees on a 10-hour day and over one-third of those on a 12-hour day reported that they were more tired. In comparison, less than one-fifth of the employees working less than 10 hours per day reported that the compressed schedule made them more tired.

One might expect a higher proportion of employees working a 12-hour shift would be more tired than those working a 10-hour shift. Several factors, some psychological and physiological, combine to explain the opposite finding. The responses pertaining to the "10-hour day" group are heavily influenced by the employees from one firm, the majority of whom reported being more tired. In most cases, employees on the 12-hour shift were given either an increased number of breaks or more flexibility in when they could take their breaks. The 12-hour shift employees also had three, and in one firm, four days off between work periods to rest up for the next three days of work. Perhaps most important was the indication from the employees who had previously worked seven consecutive days, that the compressed schedule was no worse, and possibly even less tiring than their old arrangements. Most of the employees in the survey who had previously worked seven consecutive days were working 12-hour shifts on a compressed schedule.

TABLE 8

Distribution of Employees by Tiredness Factor Resulting
From Working on a Compressed Schedule and
Length of the Work Day

<u>Tiredness Factor</u>	<u>Distribution of Employees (%)</u>		
	<u>less than 10 hrs. per day</u>	<u>10 hrs. per day</u>	<u>12 hrs. per day</u>
More tired	15.9	55.7	37.4
Not more tired	81.8	44.3	62.6
Unknown	2.3	-	-
Total: %	100.0	100.0	100.0
No.	88	79	131

Other variables which were tested against the tiredness factor included age, sex, marital status, number of dependent children, length of time on the schedule, and being in favour of the conversion. On the basis of Chi Square tests, the last two of these variables were the only ones to have statistical significance. Employees who had been against conversion to the compressed schedule were more likely to report increased tiredness than those who favoured conversion. Employees who had been working on the compressed schedule for longer than one

year were not as likely to feel more tired than those with one year or less experience with the arrangement. However, this finding might be partly explained by the fact that two-thirds of the office employees fall into this "more than one year experience" group.

Employees who indicated that they were more tired were asked when this normally occurred. Most identified more than one period. Two-thirds of the respondents indicated that they were more tired toward the end of the shift, and one-third indicated being more tired after work. Only one-fifth reported that tiredness extended to non-working days.

The 107 employees who reported feeling more tired were also questioned concerning the seriousness of the fatigue effect. As Table 9 shows, only 15 per cent considered it to be a "serious problem". However, more than one-half considered it to be a "slight problem", and only one-quarter indicated that it was no problem at all.

TABLE 9

Distribution of Employees who Felt More Tired
as a Result of the Compressed Schedule by
Seriousness of the Problem

<u>Seriousness of Fatigue or Tiredness</u>	<u>Distribution of Employees</u>	
	<u>No.</u>	<u>%</u>
Serious problem	16	15.0
Slight problem	58	54.2
No problem	27	25.2
Unknown	6	5.6
Total	107	100.0

The findings would seem to indicate that although one-third of the employees surveyed felt more tired as a result of working on the compressed schedule, the problem was generally not great enough to change their positive attitudes toward the schedule.

Attitude Towards Work

It has often been suggested that one of the major benefits of the compressed schedule is improved employee morale, at least in the short-run. Employees were asked whether or not their attitudes towards work had changed since going to the compressed schedule.

TABLE 10

Distribution of Employees by Change in Attitudes Towards Work Resulting From Compressed Work Schedules

<u>Attitudes Towards Work</u>	<u>Distribution of Employees</u>	
	<u>No.</u>	<u>%</u>
Improved	89	29.9
Worsened	20	6.7
No change	186	62.4
Unknown	3	1.0
Total	298	100.0

Table 10 would seem to offer limited support to the "improved employee morale" hypothesis. Thirty per cent of the respondents indicated that their attitudes toward work had improved, while only seven per cent indicated that it had worsened.

Absenteeism and Turnover

Problems concerning absenteeism and turnover are often cited as reasons for converting to compressed schedules. The reasoning seems to be that improved employee morale reduces the extent of these problems, and that the extra time off gives employees an opportunity to tend to any personal business on non-working days. As well, the longer day makes it more costly for employees to be absent unnecessarily.

Absenteeism was at least partly responsible for the introduction of the schedules in one-half of the cases studied. Employers in these, and one other establishment, indicated a decline in absenteeism, although in two instances there was some question as to whether or not the improvement was attributable to the compressed schedule. There was no apparent change in absenteeism reported by the four other firms, partly because absenteeism had never been a serious problem.

Turnover of employees had never been a problem in six of the establishments visited, and there was no change resulting from the compressed schedule. In three companies, turnover was reduced but it was not always clear what part the schedule played in the change. In the one remaining firm, turnover continued to be a problem on the night shift even after the implementation of the compressed schedule.

Employers indicated that very few employees resigned as a result of the implementation of the compressed schedule, even though some had threatened to do so. In one establishment, the employees were given a continuing option of working either the 5-day or 4-day work schedule, thus minimizing the possibility of losing them.

Work Performance

Employers in seven of the ten establishments felt that productivity had increased since the conversion to the compressed schedule, but only two felt that improved work performance, resulting from improved morale, had played a role. Several of the jobs carried out by the employees were machine-paced, where output could not be visibly increased by better work efforts. Most employers placed greater emphasis for productivity increases on other "structural" factors associated with the schedule. These include such things as fewer start-ups and shut-downs, longer production runs and better scheduling flexibility. Two firms also indicated that new equipment, and other changes in the work environment may have been responsible for the increases.

Only one firm was able to provide statistics on the productivity increases. While the data showed a significant increase in productivity, management personnel disagreed about the importance of improved work performance associated with the compressed schedule as a contributing factor.

The employers in two firms felt that the quality of work had improved since going on the compressed schedule; however, neither was certain of the role played by the compressed schedule in this improvement.

The employees also were questioned about the overall effect of the compressed schedule on their work performance. Although there were difficulties with the phrasing of this question, one-quarter of the respondents suggested that they "got more work done", while more than one-half saw no effect on work performance.

Work-Related Expenses and Travel Time

Employees were asked about the effect of the compressed schedule on average weekly work-related expenses, such as travel and meal costs. Even though the number of days worked per week had decreased, Table 11 shows that only forty per cent of the respondents reported that costs had decreased. One reason why more employees did not find their costs reduced may be that the greater number of breaks taken on the compressed schedule led them to spend at least as much money as they did before.

TABLE 11

Distribution of Employees by Effect of Compressed
Schedule on Work-Related Expenses

<u>Effect on Expenses</u>	<u>Distribution of Employees</u>	
	<u>No.</u>	<u>%</u>
Increased	28	9.4
Decreased	119	39.9
No Change	150	50.4
Unknown	1	0.3
Total	298	100.0

Information was also obtained concerning commuting time. Not only does an employee travel to and from work fewer times on the compressed schedule, but since the schedule increases the number of hours worked per day, he also makes at least one trip during off-peak commuting periods. Despite this fact, only fifteen per cent of the respondents, most working in large metropolitan areas, indicated that their travel time per day had decreased as a result of the compressed schedule. It should be noted that a large majority of the employees surveyed worked in smaller communities where the peak period traffic problem was minimal or non-existent.

Recruiting Potential of Compressed Schedule

One-half of the employers noticed some improvement in the company's ability to recruit new employees since implementing the compressed schedule. The recruiting attractiveness of the compressed schedule was also tested on the 85 employees who came to their firms after the implementation of the schemes. Of these

new employees, 81 per cent knew that the company operated a compressed schedule at the time they applied for a job; and 36 per cent of those who knew about the schedule stated that it was an important factor in their decision to apply for and take a job in the establishment.

B. Personal Effects

Information was obtained through the survey on how the compressed schedule affected family life, social life and the use of non-working time. As was indicated earlier, one of the most important benefits of the compressed schedule is that it creates larger blocks of usable free time. The survey sought to determine how these larger blocks of free time were being used, and whether or not this was perceived as a benefit by the employees.

Use of Non-Working Time

Table 12 shows the proportion of employees engaging in selected activities on the extra day(s) off which occurred as a result of going on a compressed schedule. Working around the home and spending more time with family and friends were the two activities most often specified.

TABLE 12

Activities Normally Carried Out On Extra Day(s)-Off
by the Proportion of Employees Engaging In Each Activity

<u>Activities</u>	<u>Proportion of Employees</u> <u>Number*</u>	<u>Per Centage</u>
Working around the home	210	70.5
Spending more time with family and friends	207	69.5
Resting around the home	148	49.7
Taking part in indoor/outdoor recreation	137	46.0
Shopping	97	32.6
Working at a second job	17	5.7
Other	32	10.7

*298 employees responded to this question, and many checked more than one activity.

In the interviews, a number of employees stated that, while they had (an) extra day(s) off as a result of the compressed schedule, the longer hours worked per day made it more difficult to complete the household chores normally done during the week. Consequently, they had to spend at least part of the extra day(s) off doing things which previously had been done on working days. They, therefore, did not see the larger blocks of "free time" as a significant benefit. On the other hand, several employees indicated that the extra day(s) off gave them an opportunity to do many jobs around the home which they may otherwise never have found time to do, or for which they would have had to pay a serviceman.

Family Life

A large proportion of employees indicated that the compressed schedule had a significant effect on family life. As Table 13 shows, 50 per cent of the respondents felt that the compressed schedule had improved their family life, while only 10 per cent indicated that family life had worsened. As mentioned earlier, 70 per cent of the employees surveyed spend at least part of the extra day(s) off, with their families. For many, this provided another full day to spend with their children or spouse, and for most this was considered an advantage. It was an especially significant advantage for those who had previously worked on irregular schedules.

TABLE 13

Distribution of Employees by the Effect of
The Compressed Schedule on Family Life*

Effect of The Compressed Schedule	Distribution of Employees	
	Number	Per Centage of Employees
Family life better	116	50.2
Family life worse	23	10.0
No affect on family life	92	39.0
Totals	231	100.0

*Includes only those respondents who have a spouse and/or other dependents.

Social Life

While the compressed schedule had a less significant effect on social life, the same general findings, as for family life, would seem to hold. Table 14 shows that almost one-third of the employees surveyed felt that their social lives had improved, while about twenty per cent stated that their social lives had worsened, usually on working days only.

TABLE 14

Distribution of Employees by the Effect of the
Compressed Schedule on Social Life

The Effect of the Compressed Schedule on Social Life	Distribution of Employees	
	<u>Number</u>	<u>Per Centage of Total</u>
Social Life better	92	30.9
Social Life worse on working days only	47	15.8
Social Life generally worse	12	4.0
No effect on Social Life	135	45.3
Unknown	6	2.0
Totals	298	100.0

In the interviews, a number of employees, especially those who had previously worked irregular schedules, indicated that the fewer continuous days of work and the greater number of weekends off enabled them to get back into the mainstream of life. Several stated that when they worked "nights" for seven consecutive days, they quite often saw little of their family or friends for several days at a time. Needless to say, the compressed schedule was regarded as an improvement when compared to the previous arrangements.

SUMMARY AND CONCLUSIONS

This report has presented the results of a pilot study of the impact of compressed work schedules in ten establishments. The limitations associated with the small sample size make it difficult to generalize beyond these establishments, particularly concerning the attitudes of employees toward the schedule. However, the major findings of the study should be of interest to any organizations which may be considering the adoption of a compressed schedule.

In that context the most important conclusion of this study is that it is not helpful to attempt to make a general statement about the benefits of compressed schedules covering all situations. Whether a compressed schedule will bring significant benefits to a particular firm and its employees depends upon certain characteristics of the firm, and of the employees involved. Among the establishments examined in this study, the relative success of the schedule appeared to be dependent on the type of operation in the firm, (e.g. whether it requires continuous staffing) the type of work carried out by the employees involved in the schedule, their previous schedule, the age and family characteristics of these employees, and the extent to which they have been involved in the planning and implementation of the schedule.

The compressed schedules examined in this study were introduced in order to alleviate problems of production scheduling, absenteeism and turnover and employee discontent with existing schedules, or as a further step in improving working arrangements. Employees generally had some voice in the changes and, in a few cases, actively participated in both the planning and the implementation processes.

Most employees favoured conversion to the compressed schedule. When surveyed, the large majority were satisfied, to varying degrees, with their experiences under the schedules. Satisfaction with the arrangement was most common among office employees, who usually worked fewer than 10 hours per day, and among those in the under 45 year age group. In total, only 11 per cent of the workers were dissatisfied with the schedules. Nonetheless, minority opposition to the schedule is an issue that management should be prepared to address.

In comparison with their previous schedules, one-fifth of the office and over two-fifths of the non-office employees reported that they were more tired as a result of working the compressed schedule. Tiredness or fatigue was

most often a factor towards the end of the shift and, to a lesser extent, after work and on non-working days. Among employees who were more tired, the large majority regarded increased fatigue as no problem or as only a slight one. However, 15 per cent of those who were more tired (5 per cent of all workers surveyed) considered fatigue to be a serious problem. Although it might be expected that serious fatigue effects would be most prominent among employees working 12 hour shifts, this was not borne out by the study. Part of the explanation may have to do with the difference between the compressed schedule and the previous schedule. Many of the persons working 12 hour shifts previously had worked irregular and more tiring schedules, in some instances consisting of work periods of seven consecutive days, and they now have breaks every three days.

In terms of other effects, over one-quarter of the employees stated that their work attitudes had improved. Work-related expenses decreased for two-fifths of the employees, but only 15 per cent reported that travel time per day had declined as a result of working the new arrangement.

With regard to personal factors, one half of the employees felt that their family lives had improved since conversion and nearly one-third found their social lives generally better. These positive reactions must again be viewed in the perspective of some of the previous schedules which may have had detrimental effects on non-working life.

Among activities carried out on extra days off, a large majority of employees spent at least part of the time working around the house. There was evidence, although not fully explored, to suggest that many chores previously done after work are now transferred to non-working days because of the longer hours worked daily.

Absenteeism and turnover rates improved, at least in the short run, in most firms where there had been a problem before conversion. In the majority of establishments, employers also felt that productivity had increased but usually found it difficult to relate this increase exclusively to the new schedule. Several employers reported that recruiting potential had improved since the schedule was introduced. A number of employees who had joined their firms since the implementation of the compressed schedule reported that it had been an important factor in their decision to apply for their present job.

